



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION TO MODIFY
CONSTRUCTION PERMIT BPCDT-19991020ABK
KOCB-DT- OKLAHOMA CITY, OKLAHOMA
DTV - CH. 33 - 1000 kW - 475.6 M HAAT**

Prepared for: KOCB Licensee, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a registered Professional Engineer in the Commonwealth of Virginia, Registration No. 7418, and in the State of New York, Registration No. 63418.

GENERAL

This office has been authorized by KOCB Licensee, LLC, licensee of KOCB(TV), channel 34, Oklahoma City, Oklahoma, and permittee of the paired Digital Television Allotment for KOCB-DT, channel 33, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of this application to modify its current authorization, construction permit BPCDT-19991020ABK. The instant application to modify KOCB-DT's construction permit is necessary as a component of the permittee's efforts to implement its digital facility on DTV channel 33 by sharing a common antenna with KOCB(TV) on channel 34. In order to physically implement KOCB-DT and KOCB(TV) sharing the same antenna on the existing KOKH-TV support structure the modifications proposed herein are required.

It is proposed herein to install a new Dielectric omnidirectional antenna, type TFU-30GBH-R O8 DC, to be commonly used by both KOCB-DT and KOCB(TV). The new antenna is to be mounted on the existing KOKH-TV tower support structure located at 35E 32' 58" N latitude, 97E 29' 18" W longitude. The existing structure is registered in the FCC's tower registration database, #1011337. An application for a construction permit to authorize the use of this common antenna by KOCB(TV) at this site is pending, file number BPCT-20020722AAF. The modifications, as proposed herein, will serve to further the Commission's goals in the deployment of DTV service in the United States.

PROPOSED OMNIDIRECTIONAL ANTENNA

It is proposed to install a new omnidirectional antenna, Dielectric TFU-30GBH-R O8 DC for common use by both KOCB-DT and KOCB(TV). Since the proposed antenna site differs from the site specified in KOCB-DT's construction permit, and the proposed HAAT and ERP are slightly different, the instant application for modification of construction permit is required. The proposed omnidirectional transmitting antenna shall employ an electrical beam tilt of 0.75 degrees below the horizontal plane. The antenna manufacturer's vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibit 2, and tabulated in Exhibit 3. A Vertical Plan Antenna Sketch is provided in Exhibit 1.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.684 of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. The predicted principal community (48 dBu) contour completely encompasses the principal community of license, shown in Exhibit 4, as required by Section 73.625(a) of the Commission's rules. The predicted 41 dBu contour is also shown in Exhibit 4.

ALLOCATION CONSIDERATIONS

NTSC Allocation Considerations

An interference study was performed, using the Commission's application analysis program, tv_process, to ensure that the proposed DTV facility is in compliance with the Commission's *de minimis* interference requirement contained in Section 73.623(c)(2) of the Commission's rules. The study showed that the DTV facility proposed herein is predicted to cause no increase in the interference population in excess of the Commission's *de minimis* criteria to any authorized NTSC television facility.

DTV Allocation Considerations

The same study was evaluated to determine if the proposed modification of KOCB-DT is predicted to cause any level of new prohibited interference to other authorized DTV facilities, including other DTV stations, DTV expansion construction permits, DTV allotments or pending DTV applications. The study results indicate that the instant proposal is predicted to cause no unacceptable level of new interference to the populations served by any other relevant DTV facility, and thereby is in compliance with the *de minimis* interference criteria contained in Section 73.623(c)(2) of the Commission's Rules.

Class A Television Allocation Considerations

As required in Section 73.623(c)(5) of the FCC's Rules, as established in the Report and Order establishing Class A Television Service, released April 4, 2000, a study of interference contour overlap was performed, based on the KOCB-DT facility proposed herein, to establish compliance with the protection requirements contained therein. Results indicate a class A LPTV station, KCHM-LP, channel 36, Oklahoma City, located 1.02 km from KOCB-DT's CP site, and 2.13 km from the modified KOCB-DT site proposed herein. KCHM-LP, Oklahoma City, is authorized to operate on channel 36 by the grant on May 4, 2001 of a construction permit based on an application for "displacement relief", BPTTL-20000712AAR, and subsequent grant on March 7, 2002 of license, BLTTA-20010709ACA. KCHM-LP was displaced from its previous operation on channel 59, BLTTL-19970709JA.

Section 73.623(c)(5) establishes the contour overlap criteria based on the D/U signal ratios for "DTV-into-analog TV" specified in paragraph (c)(2) of Section 73.623. The

D/U ratio specified in (c)(2) for the channel relationship between KCHM-LP, channel 36, and KOCB-DT, channel 33, (N-3) is minus 30 dB. Interference is assumed to exist when the undesired contour overlaps the desired contour. The geographic relationship between the transmitter sites of the two facilities (2.13 km) approaches co-location. It is known that co-located facilities do not interfere with each other as long as the ratios of their powers does not exceed the D/U signal ratio defined for interference. In this instance the ratio of KCHM-LP's ERP to KOCB-DT's ERP is minus 13 dB. Taking into account the 2.13 km displacement, the directional antenna pattern used by KCHM-LP, the antennas' elevations above ground, the antennas' elevation patterns, FCC curves and other relevant factors, the study results show that the signal D/U ratio does not reach minus 30 dB anywhere within KCHM-LP's protected service area. As shown in exhibits 5, 6, 7 and 8 the interference contours of KOCB-DT do not overlap the protected service contour of KCHM-LP, therefore no interference is caused to KCHM-LP by either KOCB-DT's construction permit facility, BPCDT-19991020ABK, or the KOCB-DT modified facility proposed herein.

The study and analysis therefore shows that, as a result of the changes proposed herein, no prohibited contour overlap is predicted to occur with KCHM-LP or any other LPTV station which was granted a Certificate of Eligibility for Class A Status in Public Notice DA 00-1224, released June 2, 2000, and has subsequently obtained class A status.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed KOCB-DT transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference created by this proposal in accordance with applicable Rules.

ENVIRONMENTAL CONSIDERATIONS

GENERAL

The proposal described herein meets the criteria specified in Section 1.1306 of the FCC Rules and Regulations as an action which is categorically excluded from environmental processing. The proposed TV facility involves neither a site location specified under Section 1.1307(a)(1)-(7) of the Rules nor high intensity lighting as specified in Section 1.1307(a)(8).

RADIO FREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted new guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. The guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations that apply in

cases that affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with guideline limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level for "uncontrolled" environments is 0.2 milliwatts per centimeter squared (mW/cm^2) when applied to broadcast facilities operating between 30 MHz and 300 MHz, and for broadcast facilities operating between 300 MHz and 1500 MHz, primarily UHF TV stations, is derived from the formula, $(\text{frequency}/1500)$. The MPE level for "controlled" environments is 1.0 milliwatts per centimeter squared (mW/cm^2) for operations between 30 MHz and 300 MHz, and for broadcast stations operating between 300 MHz and 1500 MHz is derived from the formula, $(\text{frequency}/300)$. The predicted emissions of KOCB-DT channel 33 must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For KOCB-DT, which will operate on television Channel 33 (584-590 MHz), the MPE is 0.391 milliwatts per centimeter squared (mW/cm^2) in an "uncontrolled" environment and 1.957 mW/cm^2 in a "controlled" environment. The proposed KOCB-DT facility will operate

with a maximum ERP of 1000 kW from a horizontally polarized omnidirectional transmitting antenna with a centerline height of 465.4 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the KOCB-DT facility is predicted to produce a power density at two meters above ground level of 0.01402 mW/cm², which is 3.58% of the FCC guideline value for "uncontrolled" environments, and 0.716% of the FCC guideline value for "controlled" environments (see Appendix A). The total percentage of the ANSI value at the proposed site, considering the cumulative radiation of all stations at the site, is only 49.84% of the limit for "uncontrolled" environments, and 9.97% of the limit for "controlled" environments.

OCCUPATIONAL SAFETY

The licensee of KOCB(TV) and permittee of KOCB-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KOCB-DT and TV antenna. The applicant is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection to personnel. As an additional safety measure, the base of the tower will be fenced to preclude casual access. In light of the above, the proposed KOCB-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

It is submitted that the instant proposal to modify KOCB-DT's construction permit, BPCDT-19991020ABK, as described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: August 12, 2002



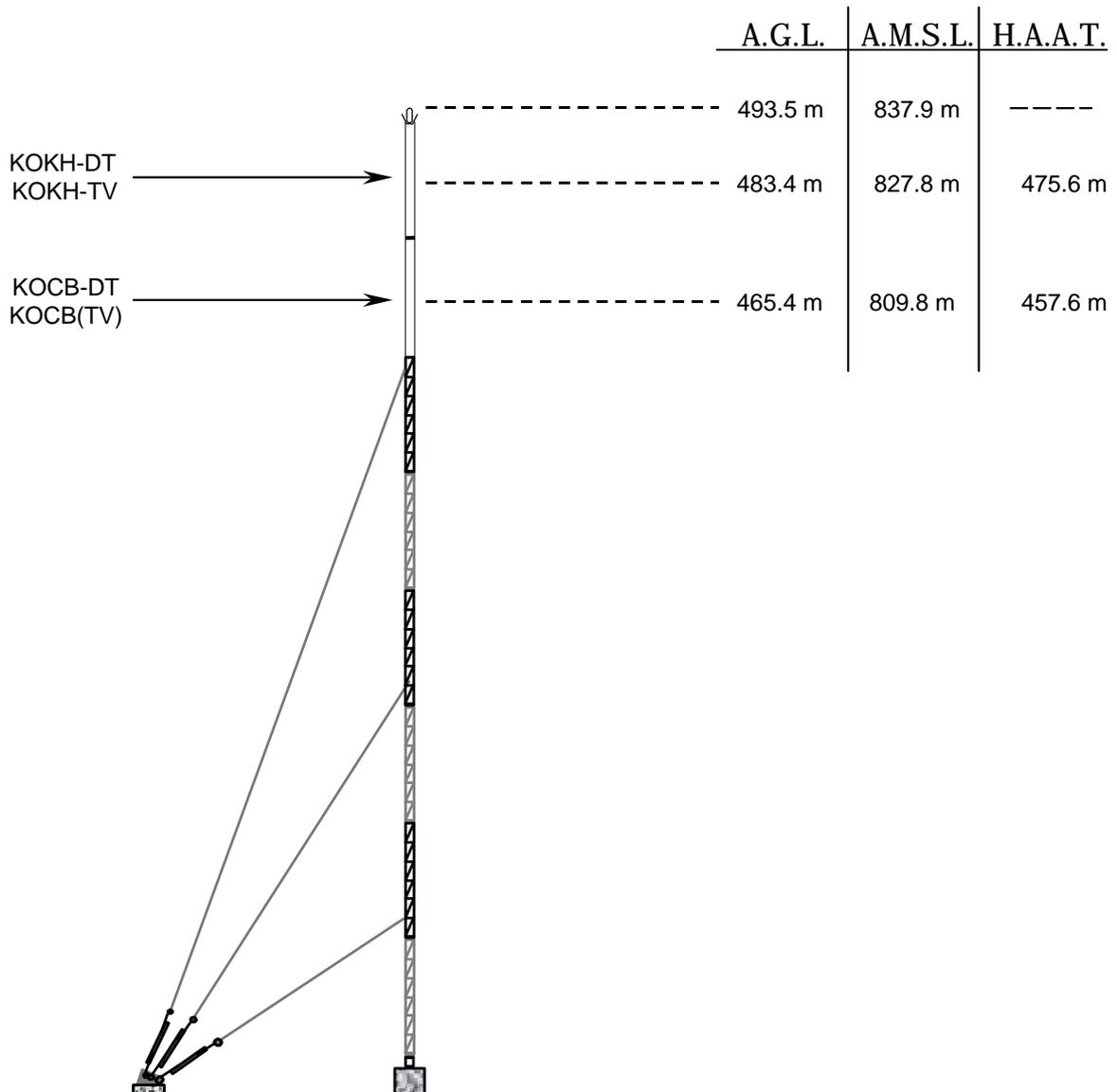
John E. Hidle, P.E.



COORDINATES NAD-27

NORTH LATITUDE: 35° 32' 58"
WEST LONGITUDE: 97° 29' 18"

EXHIBIT 1



VERTICAL PLAN ANTENNA SKETCH

KOCB-DT - Ch. 33 - 1000 kW ERP - 457.6 m HAAT
(OMNI-DIRECTIONAL)
OKLAHOMA CITY, OKLAHOMA
AUGUST, 2002

CARL T. JONES
CORPORATION

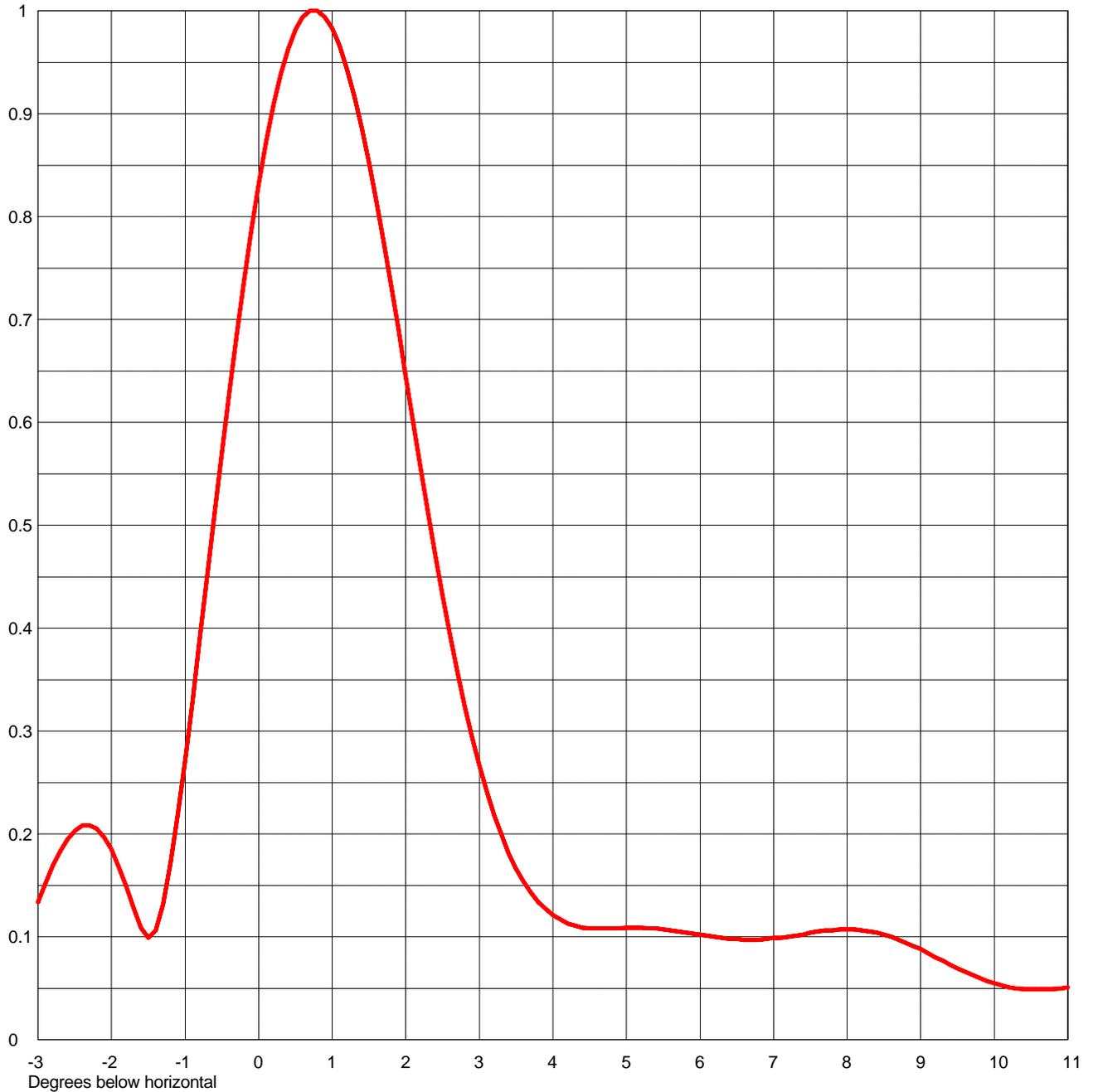
NOTE : NOT DRAWN TO SCALE



Proposal Number
Date **20 Jun 2002** Revision **Exhibit 2A**
Call Letters **KOCB-DT** Channel **33**
Location **Oklahoma City, OK**
Customer
Antenna Type **TFU-30GBH-R O8 DC**

ELEVATION PATTERN

RMS Gain at Main Lobe	24.5 (13.89 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	17.0 (12.30 dB)	Frequency	587.00 MHz
Calculated / Measured	Calculated	Drawing #	30G245075



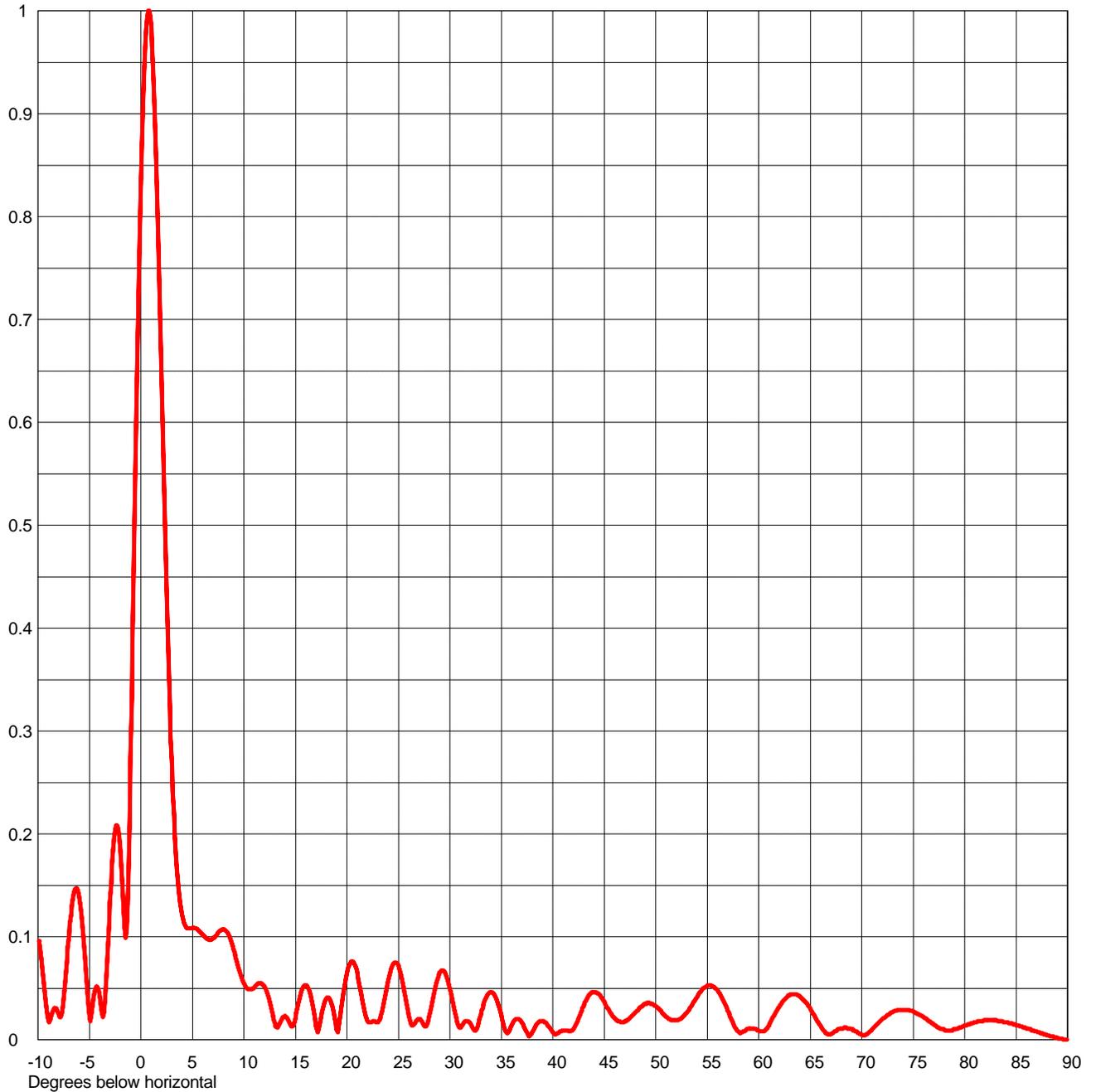
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Proposal Number
Date **20 Jun 2002** Revision **Exhibit 2B**
Call Letters **KOCB-DT** Channel **33**
Location **Oklahoma City, OK**
Customer
Antenna Type **TFU-30GBH-R O8 DC**

ELEVATION PATTERN

RMS Gain at Main Lobe	24.5 (13.89 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	17.0 (12.30 dB)	Frequency	587.00 MHz
Calculated / Measured	Calculated	Drawing #	30G245075



Remarks:



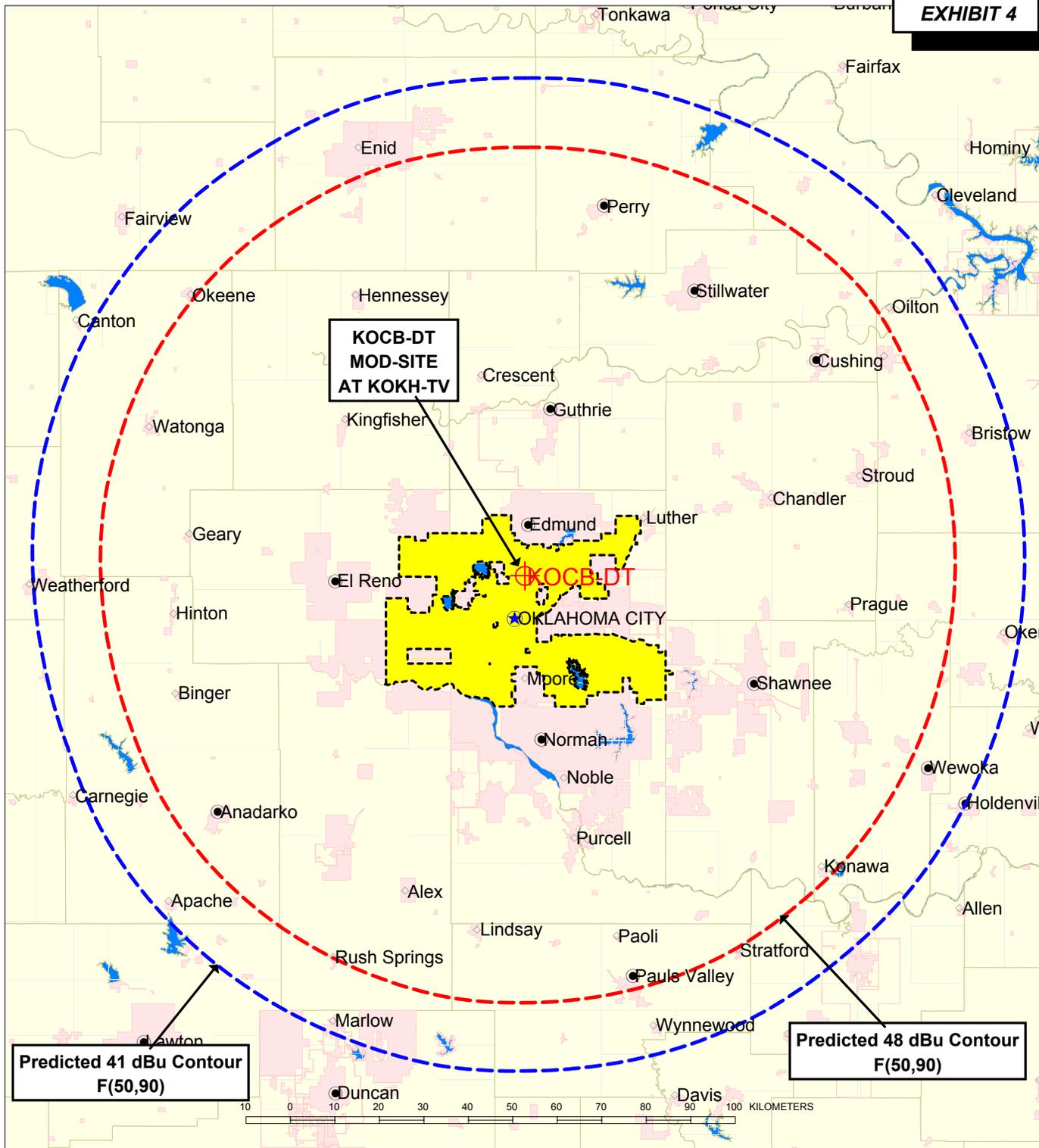
Proposal Number
 Date **20 Jun 2002** Revision **Exhibit 3**
 Call Letters **KOCB-DT** Channel **33**
 Location **Oklahoma City, OK**
 Customer
 Antenna Type **TFU-30GBH-R O8 DC**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **30G245075**

Angle	Field										
-10.0	0.103	2.4	0.472	10.6	0.049	30.5	0.026	51.0	0.022	71.5	0.015
-9.5	0.060	2.6	0.394	10.8	0.049	31.0	0.012	51.5	0.019	72.0	0.020
-9.0	0.018	2.8	0.324	11.0	0.051	31.5	0.018	52.0	0.019	72.5	0.024
-8.5	0.029	3.0	0.266	11.5	0.055	32.0	0.016	52.5	0.021	73.0	0.027
-8.0	0.025	3.2	0.218	12.0	0.052	32.5	0.009	53.0	0.026	73.5	0.029
-7.5	0.042	3.4	0.181	12.5	0.037	33.0	0.024	53.5	0.033	74.0	0.029
-7.0	0.101	3.6	0.154	13.0	0.016	33.5	0.040	54.0	0.041	74.5	0.029
-6.5	0.143	3.8	0.134	13.5	0.016	34.0	0.046	54.5	0.049	75.0	0.027
-6.0	0.139	4.0	0.121	14.0	0.023	34.5	0.040	55.0	0.053	75.5	0.025
-5.5	0.087	4.2	0.113	14.5	0.015	35.0	0.023	55.5	0.052	76.0	0.022
-5.0	0.021	4.4	0.109	15.0	0.021	35.5	0.007	56.0	0.048	76.5	0.018
-4.5	0.046	4.6	0.108	15.5	0.043	36.0	0.014	56.5	0.039	77.0	0.015
-4.0	0.042	4.8	0.108	16.0	0.053	36.5	0.020	57.0	0.028	77.5	0.012
-3.5	0.039	5.0	0.109	16.5	0.042	37.0	0.017	57.5	0.017	78.0	0.010
-3.0	0.134	5.2	0.109	17.0	0.014	37.5	0.007	58.0	0.008	78.5	0.009
-2.8	0.169	5.4	0.108	17.5	0.021	38.0	0.007	58.5	0.008	79.0	0.010
-2.6	0.195	5.6	0.106	18.0	0.040	38.5	0.016	59.0	0.011	79.5	0.012
-2.4	0.208	5.8	0.104	18.5	0.035	39.0	0.018	59.5	0.011	80.0	0.014
-2.2	0.205	6.0	0.102	19.0	0.010	39.5	0.014	60.0	0.009	80.5	0.015
-2.0	0.185	6.2	0.100	19.5	0.033	40.0	0.007	60.5	0.008	81.0	0.017
-1.8	0.149	6.4	0.098	20.0	0.064	40.5	0.006	61.0	0.014	81.5	0.018
-1.6	0.109	6.6	0.097	20.5	0.076	41.0	0.009	61.5	0.023	82.0	0.019
-1.4	0.106	6.8	0.097	21.0	0.065	41.5	0.009	62.0	0.032	82.5	0.019
-1.2	0.172	7.0	0.099	21.5	0.039	42.0	0.010	62.5	0.039	83.0	0.019
-1.0	0.273	7.2	0.100	22.0	0.018	42.5	0.021	63.0	0.043	83.5	0.018
-0.8	0.389	7.4	0.102	22.5	0.018	43.0	0.033	63.5	0.044	84.0	0.017
-0.6	0.510	7.6	0.105	23.0	0.017	43.5	0.043	64.0	0.042	84.5	0.016
-0.4	0.628	7.8	0.106	23.5	0.031	44.0	0.046	64.5	0.037	85.0	0.014
-0.2	0.737	8.0	0.107	24.0	0.057	44.5	0.044	65.0	0.030	85.5	0.013
0.0	0.832	8.2	0.106	24.5	0.074	45.0	0.037	65.5	0.022	86.0	0.011
0.2	0.909	8.4	0.104	25.0	0.072	45.5	0.028	66.0	0.014	86.5	0.009
0.4	0.963	8.6	0.100	25.5	0.052	46.0	0.021	66.5	0.006	87.0	0.008
0.6	0.994	8.8	0.094	26.0	0.024	46.5	0.018	67.0	0.005	87.5	0.006
0.8	1.000	9.0	0.088	26.5	0.015	47.0	0.018	67.5	0.008	88.0	0.004
1.0	0.983	9.2	0.080	27.0	0.020	47.5	0.021	68.0	0.011	88.5	0.003
1.2	0.943	9.4	0.073	27.5	0.014	48.0	0.026	68.5	0.012	89.0	0.002
1.4	0.886	9.6	0.066	28.0	0.023	48.5	0.032	69.0	0.010	89.5	0.001
1.6	0.814	9.8	0.060	28.5	0.047	49.0	0.035	69.5	0.008	90.0	0.000
1.8	0.732	10.0	0.055	29.0	0.065	49.5	0.035	70.0	0.005		
2.0	0.645	10.2	0.051	29.5	0.066	50.0	0.033	70.5	0.005		
2.2	0.557	10.4	0.049	30.0	0.050	50.5	0.028	71.0	0.010		

Remarks:



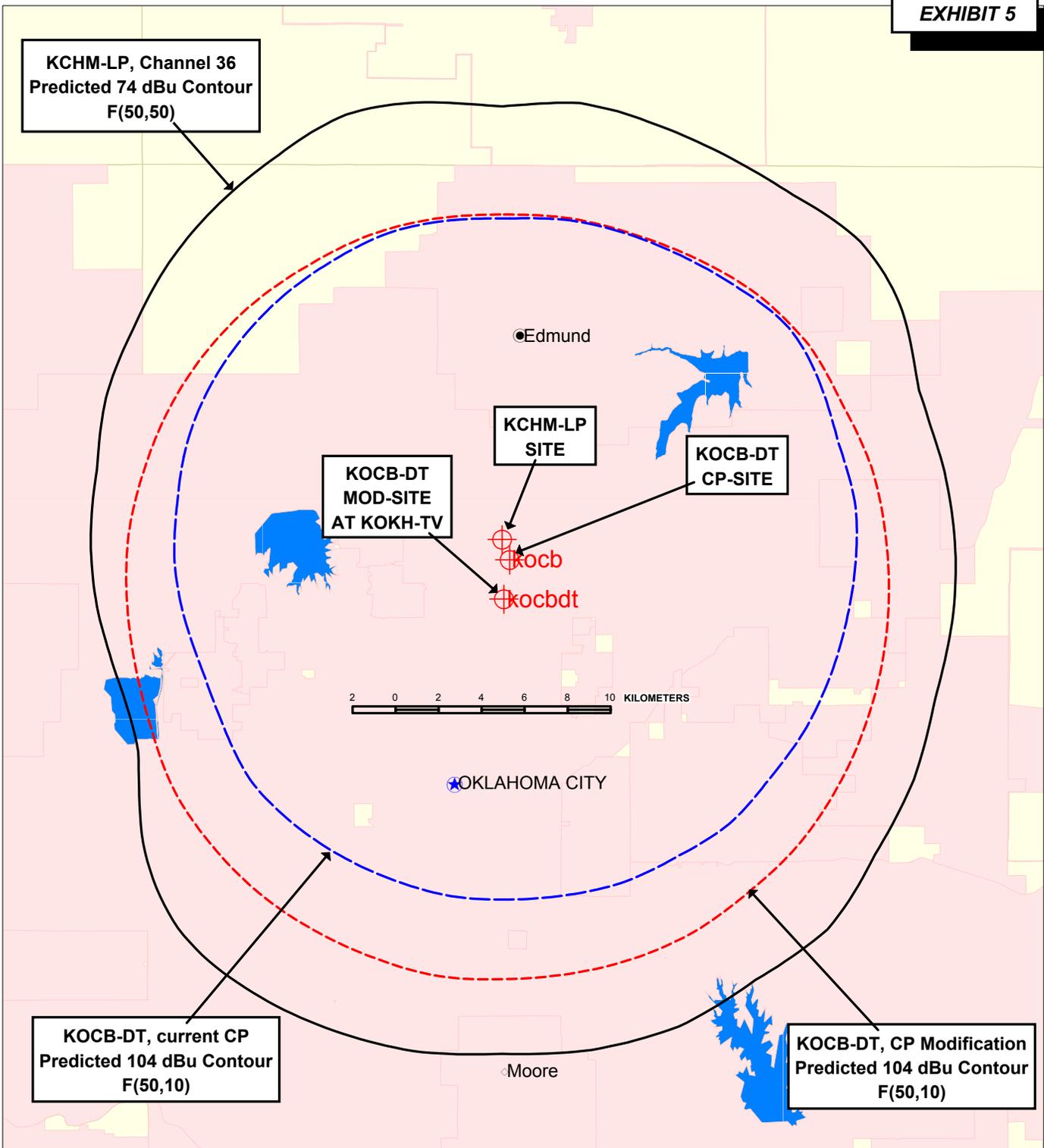
**PREDICTED COVERAGE CONTOURS
KOCB-DT, OKLAHOMA CITY, OKLAHOMA
PROPOSED MODIFIED FACILITY
CH. 33, 1000 kW, 457.6 m HAAT**

AUGUST 2002

**PREDICTED 41 dBu
NOISE LIMITED
CONTOUR
F(50,90)**

**PREDICTED 48 dBu
PRINCIPAL COMMUNITY
CONTOUR
F(50,90)**



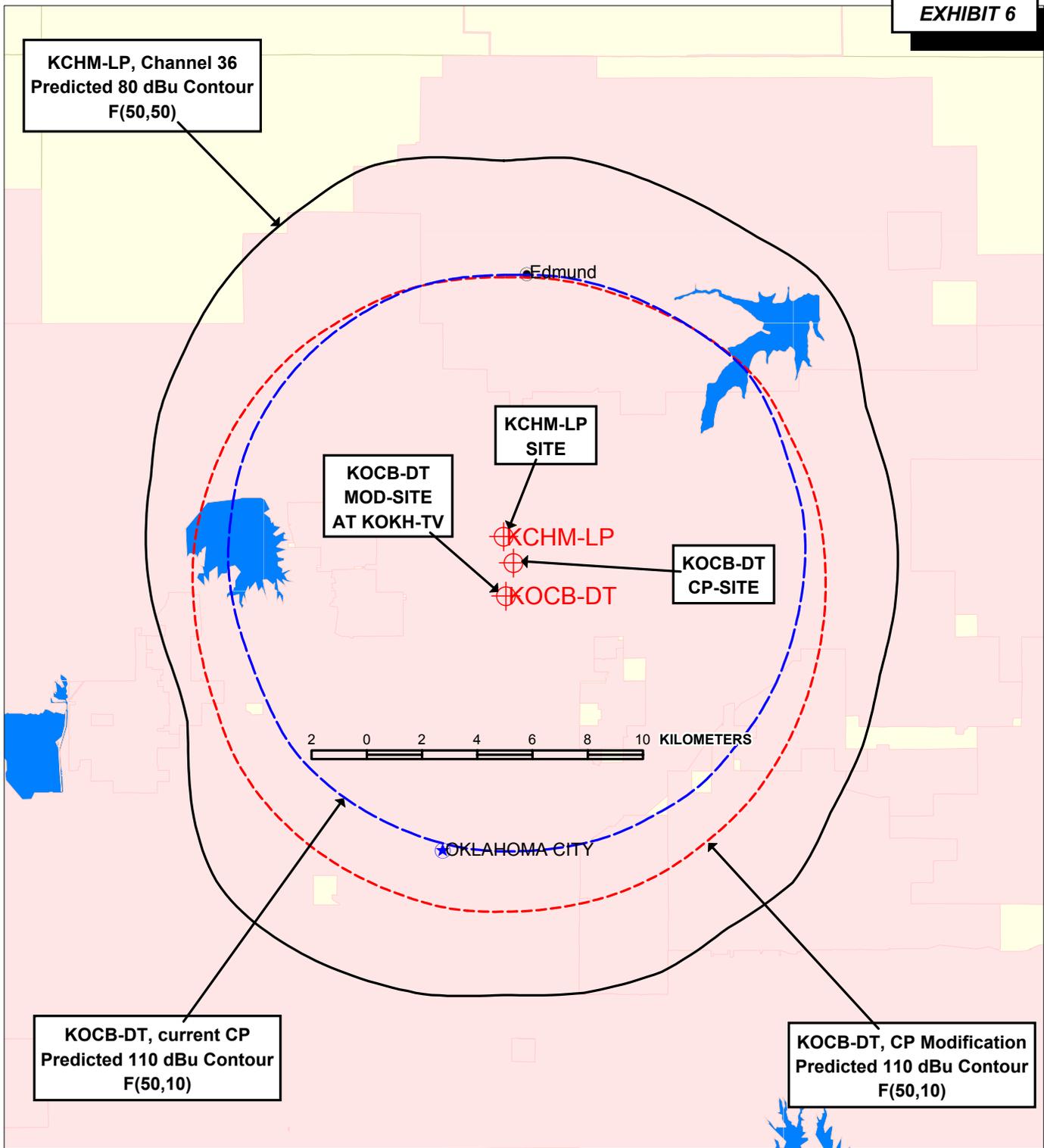


PREDICTED COVERAGE CONTOUR
74 dBu, F(50,50)

PREDICTED INTERFERENCE CONTOURS
D/U Ratio = Minus 30 dB - 104 dBu F(50,10)
KOCB-DT, OKLAHOMA CITY, OKLAHOMA

KCHM-LP, OKLAHOMA CITY, OKLAHOMA
CH. 36, 50 kW (DA-MAX), 122.9 m HAAT

CONSTRUCTION PERMIT FACILITY
CH. 33, 1000 kW, 371 m HAAT
BPCDT-19991020ABK



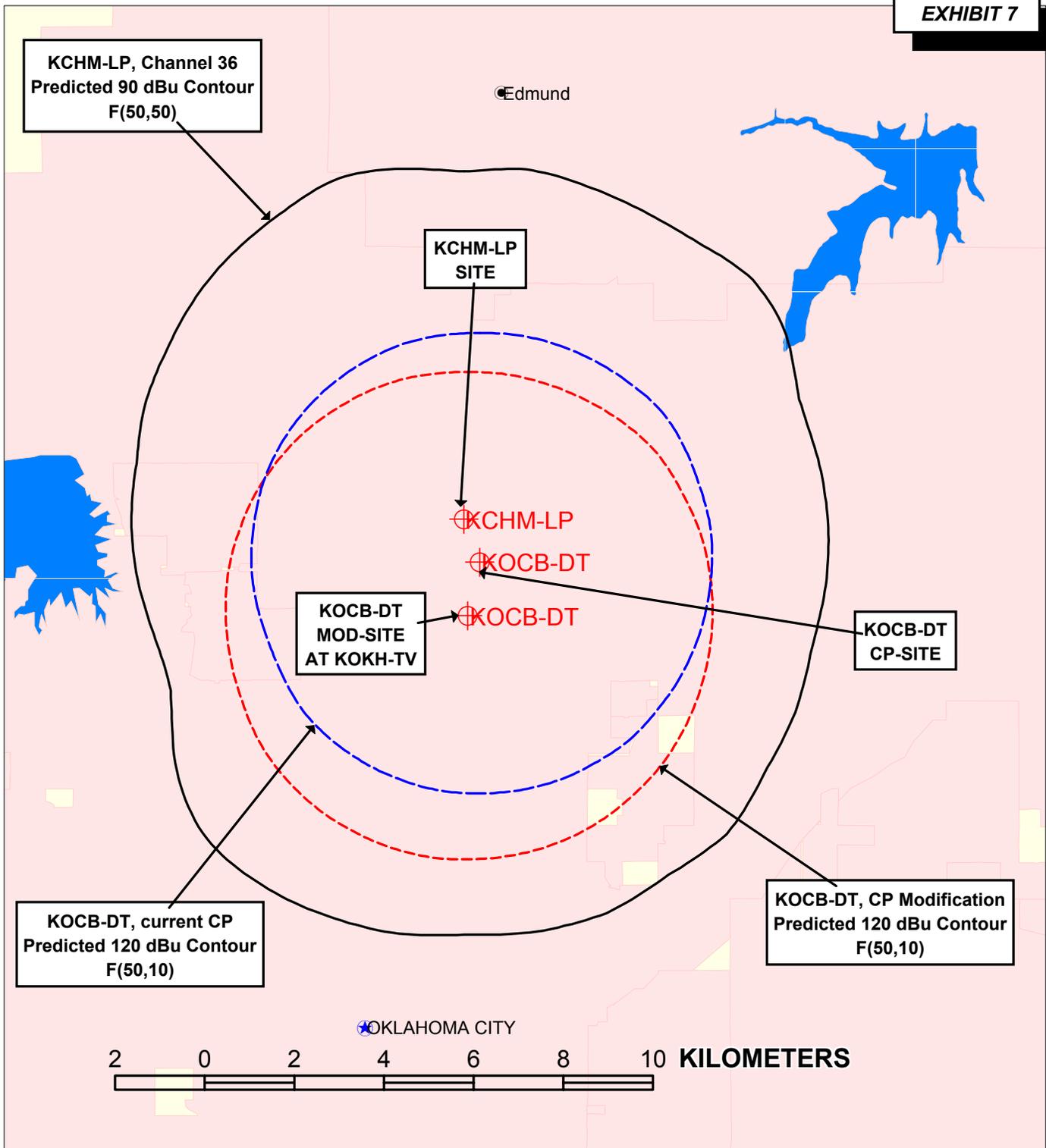
PREDICTED COVERAGE CONTOUR
80 dBu, F(50,50)

KCHM-LP, OKLAHOMA CITY, OKLAHOMA
CH. 36, 50 kW (DA-MAX), 122.9 m HAAT

PREDICTED INTERFERENCE CONTOURS
D/U Ratio = Minus 30 dB - 110 dBu F(50,10)
KOCB-DT, OKLAHOMA CITY, OKLAHOMA

CONSTRUCTION PERMIT FACILITY
CH. 33, 1000 kW, 371 m HAAT
BPCDT-19991020ABK

PROPOSED MODIFIED FACILITY
CH. 33, 1000 kW, 457.6 m HAAT



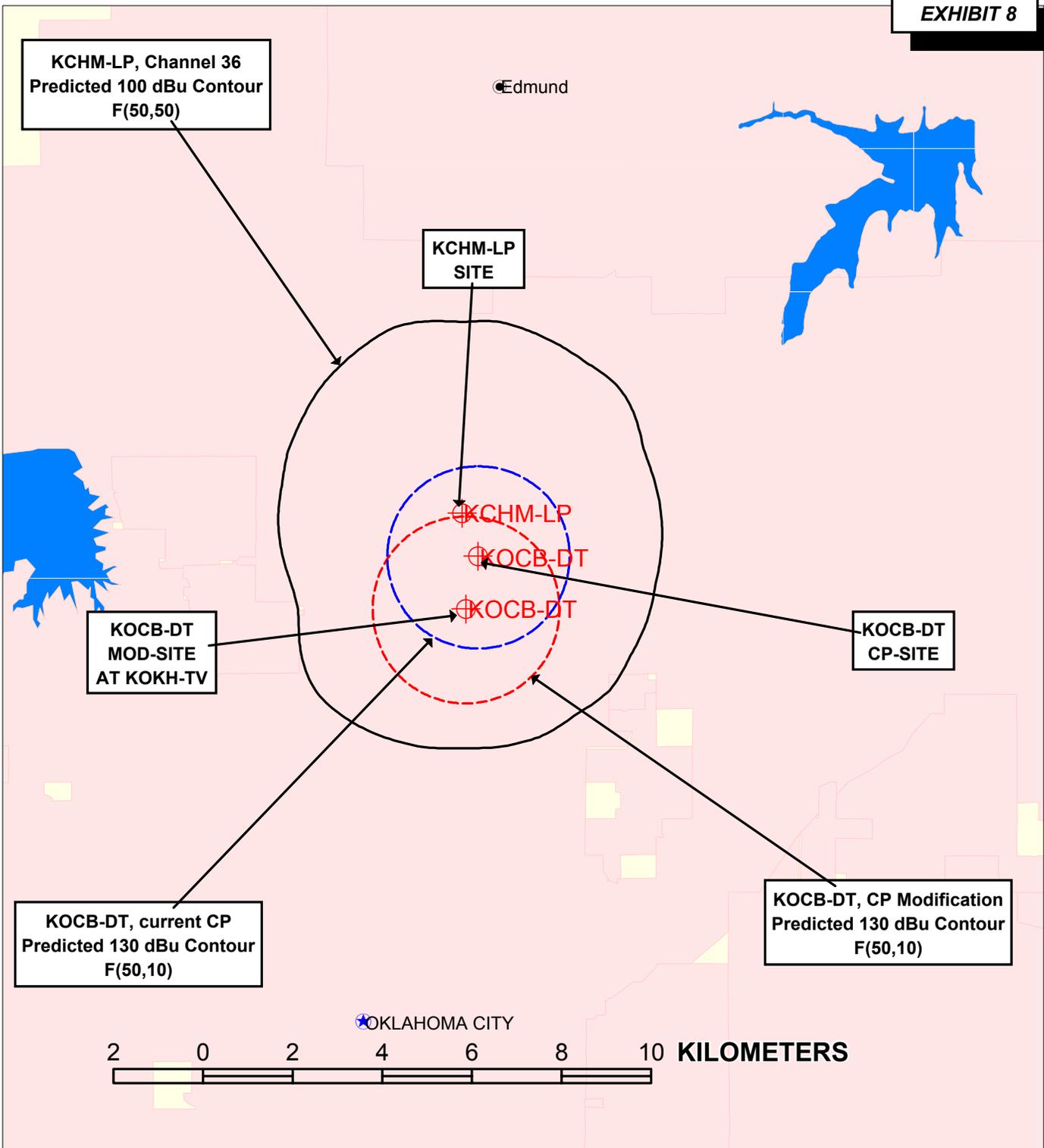
PREDICTED COVERAGE CONTOUR
 90 dBu, F(50,50)

KCHM-LP, OKLAHOMA CITY, OKLAHOMA
 CH. 36, 50 kW (DA-MAX), 122.9 m HAAT

PREDICTED INTERFERENCE CONTOURS
 D/U Ratio = Minus 30 dB - 120 dBu F(50,10)
 KOCB-DT, OKLAHOMA CITY, OKLAHOMA

CONSTRUCTION PERMIT FACILITY
 CH. 33, 1000 kW, 371 m HAAT
 BPCDT-19991020ABK

PROPOSED MODIFIED FACILITY
 CH. 33, 1000 kW, 457.6 m HAAT



PREDICTED COVERAGE CONTOUR
 100 dBu, F(50,50)

KCHM-LP, OKLAHOMA CITY, OKLAHOMA
 CH. 36, 50 kW (DA-MAX), 122.9 m HAAT

PREDICTED INTERFERENCE CONTOURS
 D/U Ratio = Minus 30 dB - 130 dBu F(50,10)
 KOCB-DT, OKLAHOMA CITY, OKLAHOMA

CONSTRUCTION PERMIT FACILITY
 CH. 33, 1000 kW, 371 m HAAT
 BPCDT-19991020ABK

PROPOSED MODIFIED FACILITY
 CH. 33, 1000 kW, 457.6 m HAAT

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
KOCB-DT OKLAHOMA CITY, OKLAHOMA
CHANNEL 33, 1000 kW ERP, 457.6 m HAAT
AUGUST, 2002

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT **</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>PREDICTED POWER DENSITY (mW/cm²)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm²)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
KOKH-TV	TV	25	539	H	481	3470.000	0.300	0.02255	0.359	6.28%
KOKH-DT	DT	24	533	H	481	1000.000	0.300	0.01299	0.355	3.66%
KOCB(TV)	TV	34	593	H	463	1200.000	0.300	0.00842	0.395	2.13%
KOCB(DT)	DT	33	587	H	463	1000.000	0.300	0.01402	0.391	3.58%
KRXO-FM	FM	299	107.7	H & V	311	99.000	1.000	0.06839	0.200	34.20%

TOTAL PERCENTAGE OF ANSI VALUE= 49.84%

*** The antenna heights indicated above are 2 meters less than the actual antenna heights so that the predicted power densities consider the 2 meter human height allowance.*